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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,543	02/28/2002	Alan B. Shuey	020014	9808

7590 09/17/2004

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EXAMINER

CHAN, KO HUNG

ART UNIT	PAPER NUMBER
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3632

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/085,543

Applicant(s)

SHUEY, ALAN B.

Examiner

Korie H. Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-5,8-10 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-5,8-10 and 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No: \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Rejections - 35 USC § 103***

Claims 3-5, 8-10 and 14-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Redman et al (US patent no. 4,550,890) in view of Nelson (US patent no. 3,069,738) or Sword (US patent no. 4,653,792) and further in view of Arakawa (US patent no. 4,656,698). Redman discloses a clamp for a support system to suspend an object from an overhead beam comprising a generally C-clamp (11) with a threaded fastener (12) threadingly received within one of the leg (11) of the clamp, and a vertical bore (10A) receiving a suspended strap, means to restrict downward vertical movement (17) of the suspended strap relative to clamp body and to permit vertical adjustment of the pipe or article supported thereon. However, Redman does not disclose the use of a cable or the means to restrict downward movement as being a conical bore with wedge device cooperating therewith and a lock nut.

To support pipes via straps or cables are notoriously old and well-known in the art. Straps and cables are well-known obvious mechanical equivalents for suspending objects. Both Sword and Nelson teaches the use of cable (22-Nelson, Sword-32) with an end having a permanent loop through which the cable is threaded therethrough (Col. 2, lines 36-44 in Nelson and figure in Sword) for suspending an object.

Arakawa teaches a cable retention wedge system comprising a vertical bore (11) with a conical lower end portion (9), a wedge retainer (8) vertically movable within the bore, wedges (5) retained by the wedge retainer to contact a cable (W) within the bore and to be forced against the cable by the conical end portion of the bore when the retainer is at the lower part of the bore, and a spring (10) to urge the wedge retainer

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downwardly relative to the bore; wherein the cable is adjusted by forcing the cable upwardly from the bottom of the bore to release the wedges and permit movement of the cable, the wedge retainer has a threaded portion (19a) protruding below the bore with a lock nut (19) threaded onto the wedge retainer lower portion so that after the cable is positioned within retainer at the desired height, the lock nut is tightened to lock the wedge retainer and prevent movement of the wedge retainer relative to the bore.

It would have been obvious to one of ordinary skill in the art to modify the strap and strap retention assembly of Redman such that the strap is substituted with a cable for the reason that straps and cable suspension support are well-known mechanical equivalents as demonstrated by both Nelson and Sword, and consequently substituting the strap retention wedge system of Redman for a cable retention wedge system as taught by Arakawa. Such modification would have involved a mere substitution of one well-known flexible suspension device for another and consequently modifying the strap retaining device to a cable retaining device.

### ***Response to Arguments***

Applicant's arguments filed June 3, 2004 have been fully considered but they are not persuasive. Applicant's statement that the examiner is incorrect in saying that Nelson and Sword demonstrate that straps and cable suspension supports are well-known mechanical equivalents. Examiner would like to point out that the Office Action states that the primary reference of Redman discloses a strap used to suspend an elongated object and Nelson and Sword demonstrate that cable used to suspend such

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similar elongated object. Examiner took an Official Notice that the use of strap and cable to suspend elongated objects are well-known mechanical equivalents in the art.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is some suggestion to do so found in the knowledge generally available to one of ordinary skill in the art as demonstrated by Redman, Nelson, and Sword where strap or cable are being used to suspend similar elongated objects.

Applicant's argument that the strap in Redman does not appear hold the objects in Nelson or Sword is without supporting evidence. Indeed, applicant has admitted that "the use of cable for suspending objects is old" on page 7 of the amendment filed 6/3/2004. It is examiner's contention that suspending elongated object using straps is also old as demonstrated by Redman. The knowledge available to one of ordinary skill in the art for suspending objects and particularly elongated objects such as pipes, tree trunks, etc...using straps or cables are conventional and well-known.

Indeed, cable or strap for suspending or lifting have always been used interchangeably in the descriptions of inventions as demonstrated in the newly cited references to Spitsbergen (as found in paragraph 0010, 0038 for example), Clark (as

found in Col. 15, line 47 for example), or Wilkins Jr. (as found in col. 2, line 56). They are used interchangeably for the reason that they are mechanical equivalents.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Korie H. Chan whose telephone number is 703-305-8079. The examiner can normally be reached on Mondays and Tuesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leslie Braun can be reached on 703-308-2156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Korie H. Chan  
Primary Examiner  
Art Unit 3632

Khc  
September 3, 2004